

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: **Chevallier Ranch Company**
P.O. Box 5719
Helena, MT 59604-5719

State of Montana, Board of Land
Commissioners
PO Box 201601
Helena, MT 59620-1601
2. Type of action: **Application to Change a Water Right No. 30051168 41QJ**
(Statement of Claim No. 41QJ 21054)
3. Water source name: **Canyon Creek**
4. Location affected by project: **Sec. 11, 14, 15, 16 & 23 T12N, R5W, Lewis and Clark County.**

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicants propose to change a portion of the historic place of use for one water right. The proposed change would convert 248 acres of flood irrigation to a center pivot sprinkler system, add 62 acres of center pivot sprinkler irrigation and completely retire 147 acres of historic flood irrigation to compensate for the additional pivot acreage. The total acres irrigated will be 840 acres, 310 acres under the pivot and 530 flood irrigated.

The new 62 acres would be located adjacent to the converted acres in Sections 15 and 16, T12N, R5W, Lewis and Clark County.

The DNRC shall issue an Authorization to Change if the criteria in 85-2-402, MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Department of Natural Resources (DNRC) – Bryan Gartland, Hydrologist
Montana Department of Natural Resources (DNRC) – John Connors, HRO
Engineer

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: **No significant adverse impact.**

MFISH indicates a periodic dewatering problem, on Little Prickly Pear Creek, from Canyon Creek to the mouth. Significant dewatering is only problematic in drought or water short years. Although this water right claim diverts water from Little Prickly Pear Creek, the decreed source of water is Canyon Creek. Therefore, the proposed project would not contribute to any additional dewatering.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: **No significant adverse impact.**

Canyon Creek is not listed on the 303(d) list of impaired and threatened streams. The proposed project would not have an adverse affect to the water quality of the stream.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: **No significant adverse impact to groundwater quality or supply.**

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: **The historic means of diversion and the amount of water diverted are not to be changed with the proposed project. The historic means of diversion is a diversion dam on Little Prickly Pear Creek. Although the diversion dam was washed out due to above average high flows in 2011, the Applicant plans to obtain appropriate permitting in order to repair the diversion dam in 2012.**

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: **No significant adverse impact.**

According to MTNHP there are four species of concern in the area. The following are the species of concern in the area: Bald Eagle (*Haliaeetus leucocephalus*), Long-billed Curlew (*Numenius americanus*), Veery (*Catharus fuscescens*) and Bobolink (*Doichonyx oryzivorus*).

Although the species of concern are located in close proximity to the project area, no significant adverse impacts are anticipated.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: **This proposed project does not involve wetlands.**

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: **This proposed project does not involve ponds.**

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: **No significant adverse impact.**

The project area consists of three major types of soil; Crago gravelly loam, Geohrock gravelly loam and Villard-Villy silt loams. The typical profile of the Crago gravelly loam is from 0 to 4 inches gravelly loam and 4 to 32 very gravelly clay loam. The typical profile of the Geohrock gravelly loam is from 0 to 4 inches gravelly loam, 4 to 8 very gravelly clay loam and 8 to 17 very gravelly loam. The typical profile of the Villard- Villy silt loam is from 0 to 2 inches slightly decomposed plant material, 2 to 5 silt loam, 5 to 21 silty clay loam and 21 to 32 loam.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: **No significant adverse impact.**

The place of use under the pivot will be planted crop and should limit noxious weeds from growing. The land owners are responsible for controlling any noxious weeds on the property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: **No significant adverse impact.**

The pivot will be located in an area already used for irrigation and should not cause a deterioration of air quality or cause adverse effects to vegetation.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: **No significant adverse impact.**

As per Patrick Rennie, State Trust Lands Archaeologist, there are no cultural resources associated with the parcel of State Land within the proposed place of use.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: **No significant adverse impact.**

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: **No significant adverse impact.**

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: **No significant adverse impact.**

This project will not impact access to or the quality of recreational and wilderness activities.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: **There will be no significant adverse impact to human health from the proposed project.**

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes X No If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Half of the place of use under the proposed pivot is owned by the State of Montana and is subject to regulation by the Trust Lands Division.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? **No significant adverse impact.**
- (b) Local and state tax base and tax revenues? **No significant adverse impact.**
- (c) Existing land uses? **No significant adverse impact.**
- (d) Quantity and distribution of employment? **No significant adverse impact.**
- (e) Distribution and density of population and housing? **No significant adverse impact.**
- (f) Demands for government services? **No significant adverse impact.**
- (g) Industrial and commercial activity? **No significant adverse impact.**
- (h) Utilities? **No significant adverse impact.**
- (i) Transportation? **No significant adverse impact.**
- (j) Safety? **No significant adverse impact.**
- (k) Other appropriate social and economic circumstances? **No significant impact.**

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts **There have been no secondary impacts on the physical environment and human population identified at this time.**

Cumulative Impacts **There have been no cumulative impacts on the physical environment and human population identified at this time.**

3. Describe any mitigation/stipulation measures: **There is no mitigation involved with this proposed project. There have not been stipulation measures identified at this time.**

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

There does not at appear to be a reasonable alternative to the proposed action. No action would dictate that the Applicants continue flood irrigation without using the proposed pivot.

PART III. Conclusion

1. *Preferred Alternative:* **No preferred alternatives identified.**

2. *Comments and Responses:* **None at this time.**

3. ***Finding:***

Yes___ No_**X**___ *Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **An environmental assessment is the appropriate level of analysis because no significant adverse impacts were identified for the proposed project.**

Name of person(s) responsible for preparation of EA:

Name: Jennifer Daly

Title: Water Resources Specialist, DNRC Helena Regional Office

Date: May 30, 2012